



>>Entry Name: 3-[[2-Hydroxy-1,1-bis(hydroxymethyl)ethyl]amino]-1-propanesulfonic acid, 9Cl

Synonym(s): *N*-Tris(hydroxymethyl)methyl-3-aminopropanesulfonic acid. TAPS

CAS Registry Number: 29915-38-6

Related CAS Registry Numbers(s): 91000-53-2

$(\text{HOCH}_2)_3\text{CNHCH}_2\text{CH}_2\text{CH}_2\text{SO}_3\text{H}$

Molecular Formula: $\text{C}_7\text{H}_{17}\text{NO}_6\text{S}$

Molecular Weight: 243.28

Accurate Mass: 243.077659

Percentage Composition: C 34.56%; H 7.04%; N 5.76%; O 39.46%; S 13.18%

Use/Importance: Good's buffer with pH range 7.7-9.1

Physical Description: Hygroscopic cryst.

Melting Point: Mp 194°. Mp 240 dec.°

Solubility: Mod. sol. H_2O

pKa Value: $\text{p}K_{\text{a}}$ 8.4 (20°)

Aldrich: 21993-2

Fluka: 93361

Sigma: T5130

References:

Aldrich Library of FT-IR Spectra, 1st edn., 1985, **1**, 894D, (*ir*)

Aldrich Library of NMR Spectra, 2nd edn., 1983, **2**, 794A, (*nmr*)

Gregory, J.D. *et al.*, *Science (Washington, D.C.)*, 1970, **169**, 97, (*use*)

Zeid, I. *et al.*, *Annalen*, 1974, 667, (*synth*)

McGlothlin, C.D. *et al.*, *Anal. Lett.*, 1976, **9**, 245, (*props*)

Hutchens, T.W. *et al.*, *J. Chromatogr.*, 1986, **359**, 157, (*use*)